

REMARKS

Claims 1-2, 4-30 and 32-44 are pending in the present application. The rejections under 35 U.S.C. 103 are respectfully traversed. However, in order to further the prosecution of this application, the pending claims have been amended in order to further distinguish them from the cited art. Support for the claim amendments can be found in the specification and drawings, in particular in paragraph 0118 of US 2004/0160933 (published version of the present application). No new matter has been added. Applicants believe that the present application as amended is now in condition for allowance of which prompt and favorable action is respectfully requested.

35 U.S. C. 103 Rejection

Claims 1, 2, 4, 5, 7, 10, 14, 15 17, 19, 21, 22, 25-28, 30, 32, 35, 37, 39, 41 and 43 were rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann, Jr. et al. (USPN 5,914,950) in view of Agrawal et al. (USPN 6,134,215). Claims 6 and 29 were rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann (USPN 5,914,950) and Agrawal (USPN 6,134,215) in view of Kanterakis et al. (USPN 6,389,056). Claims 11, 13, 16, 18, 20, 23, 24, 33, 34, 36, 38, 40, 42 and 44 were rejected under 35 U.S.C. 103(a) as being unpatentable over Schilling et al. (USPN 6,061,359) in view of Agrawal (USPN 6,134,215). Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schilling (USPN 6,061,359) and Agrawal (USPN 6,134,215) in view of Tiedemann (USPN 5,914,950).

The MPEP recited the standard to be applied in an issue of obviousness under 35 USC 103. Section 2143.03 of the MPEP states in part:

ALL CLAIM LIMITATIONS MUST BE CONSIDERED

"All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

The factual inquiries that are relevant in the determination of obviousness are determining the scope and contents of the prior art, ascertaining the differences between the prior art and the claims in issue, resolving the level of ordinary skill in the art, and evaluating evidence of secondary consideration. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 2007 U.S. LEXIS 4745, at **4-5 (2007) (citing *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18 (1966)). To establish a *prima facie* case of obviousness, the prior art references "must teach or suggest all the claim limitations." M.P.E.P. § 2142. As the Board of Patent Appeals and Interferences has confirmed, "obviousness requires a suggestion of all limitations in a claim." *In re Wada and Murphy*, Appeal 2007-3733 (citing *CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003)). Moreover, the analysis in support of an obviousness rejection "should be made explicit." *KSR*, 2007 U.S. LEXIS 4745, at **37. "[R]jections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *Id.* (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

Independent claims 1, 11, 14, 16-21, 23, 25, 33 and 35-44 have been amended to recite the element of "wherein each of the plurality of covering sequences is based on a remote station identifier." Specification support for the claim amendment is found, for example, in paragraph 0118 of the present application (US 2004/0160933).

"...In the example embodiment, the command streams are encoded using length-48 Hadamard sequence encoders, 610A-610N, respectively. The

Hadamard sequence number used in each encoder corresponds to the mobile identification number. However, the sequence assignment is arbitrary, and other configurations will be readily apparent to those of skill in the art. The outputs of Hadamard encoders 610A-610N may be individually gain controlled in channel gain blocks 630A-630N, respectively.” *Present application (US 2004/0160933), paragraph 0118. Emphasis added.*

On page 3, the Office Action admits that “Tiedemann does not teach a Hadamard encoder.” Thus, Tiedemann cannot disclose a Hadamard covering sequence that is based on a remote station identifier as recited in the amended claims.

On page 3, the Office Action states that “Agrawal teaches a Hadamard encoder [Col. 5, lines 18-27].” However, Agrawal does not disclose the recited element of “wherein each of the plurality of covering sequences is based on a remote station identifier.” In contrast to a covering sequence based on a remote station identifier, Agrawal discloses a Walsh function of length ‘n’ (corresponding to the covering sequence) based on the repetitions and inversions of the 2×2 Hadamard matrix. There is no disclosure of the covering sequence being based on a remote station identifier. The cited portion of Agrawal (column 5, lines 1-57) is the entirety of the disclosure of Hadamard covering sequences in Agrawal. Thus, Agrawal does not disclose the element of “wherein each of the plurality of covering sequences is based on a remote station identifier.”

“Therefore, the first two Hadamard matrices of orders 2 and 4 can be represented as:

$$H_2 = \begin{bmatrix} 1 & 1 \\ 1 & -1 \end{bmatrix} \text{ and}$$

$$H_4 = \begin{bmatrix} H_2 & H_2 \\ H_2 & H_2 \end{bmatrix} = \begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & -1 & 1 & -1 \\ 1 & 1 & -1 & -1 \\ 1 & -1 & -1 & 1 \end{bmatrix}$$

A Walsh function, W_n , then, is simply one of the rows of a Walsh function matrix (Hadamard matrix), and a Walsh function matrix of order ‘n’ is a square matrix containing n functions or sequences, each being n chips

(bits) in length.” *Agrawal (US 6,134,215), col. 5, lines 28-43. Emphasis added.*

The Office Action, on page 13, admits that “Schilling does not teach a Hadamard encoder.” Thus, Schilling cannot disclose a Hadamard covering sequence that is based on a remote station identifier as recited in the amended claims.

Kanterakis was cited on page 12 of the Office Action for disclosing that command values also indicate negative acknowledgement, or acknowledge and continue. Although Kanterakis discloses generic spreading sequences, there is no disclosure of a Hadamard covering sequence based on a remote station identifier, which is recited elements in the pending claims.

Thus, the cited references (Tiedemann, Schilling, Agrawal and Kanterakis), either taken separately or in combination, do not disclose, teach, suggest or make obvious all of the features of pending claims and the rejection should be withdrawn accordingly.

CONCLUSION

For the reasons stated above, the prior art references cited in the Office Action do not disclose, teach, suggest or make obvious the pending claims. Thus, Applicants respectfully request withdrawal of the 35 U.S.C.103 rejections based thereon.

ALLOWABLE SUBJECT MATTER

Applicants thank the Examiner for indicating the allowability of claims 8 and 9. As the amendments made herein are believed to resolve the outstanding rejections of the pending claims, all the pending claims are now believed to be allowable.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicants submit that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Applicants do not believe that any fees are due regarding this amendment. However, if any fees are required, please charge Deposit Account No. 17-0026. Applicants encourage the Examiner to telephone the Applicants' attorney should any issues remain.

Respectfully submitted,

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